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ABSTRACT

Teachers and parents completed the Adaptive Behavior Scale-School Edition (ABS-SE) and the Adaptive Behavior Inventory for Children (ABIC) while 57 educable mentally retarded (EMR) (N=36) and slow learners (N=21) completed the Children's Adaptive Behavior Scale (CABS). Analysis of variance and T-test comparisons indicated higher ratings for SL group than for the EMR group. Also, parents tended to rate their child higher than the child's teacher would rate them. Correlational analyses indicated that the concurrent validity of the ABIC when compared to the ABS-SE appears low but the relationship between the CABS and the ABS-SE is fairly high. Inconsistent correlations were found between adaptive behavior and IQ. Results further indicated inconsistent correlations between various areas measured by the different adaptive behavior scales such as self-help skills, functioning within the community, social/peer relationships and economic/vocational skills. (Author)

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Adaptive Behavior: Does the Instrument Make a Difference?

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Abstract

Teachers and parents completed the Adaptive Behavior Scale-School Edition (ABS-SE) and the Adaptive Behavior Inventory for Children (ABIC) while 57 educable mentally retarded (EMR) (N = 36) and slow learners (SL) (N = 21) completed the Children's Adaptive Behavior Scale (CABS). Analysis of variance and T-test comparisons indicated higher ratings for the SL group than for the EMR group. Also, parents tended to rate their child higher than the child's teacher would rate them. Correlational analyses indicated that the concurrent validity of the ABIC when compared to the ABS-SE appears low but the relationship between the CABS and the ABS-SE is fairly high. Inconsistent correlations were found between adaptive behavior and IQ. Results further indicated inconsistent correlations between various areas measured by the different adaptive behavior scales such as self help skills, functioning within the community, social/peer relationships and economic/vocational skills.

Adaptive Behavior: Does the Instrument Make a Difference?

There has been a recent emphasis to gather adaptive behavior information from a multiple respondent, multiple situational perspective (Mercer & Lewis, 1977; Reschly, 1979; Richmond & Kicklighter, 1980). However, in the past, children's perspectives have been excluded and teachers and parents have generally been considered individually rather than simultaneously. If such an approach is to be pursued in the future, there is a great need to determine how various instruments completed by different respondents correlate with each other. Concurrent validity data are sparse and data tend to be predictive in nature.

The present study investigated the concurrent validity of the Adaptive Behavior Inventory for Children (ABIC) (Mercer & Lewis, 1977) and the Children's Adaptive Behavior Scale (CABS) (Richmond & Kicklighter, 1980) by comparing them to the more established Adaptive Behavior Scale-School Edition (ABS-SE) (Lambert et al., 1981). It was also of interest to examine the relationship among teachers', parents' and students' ratings of adaptive behavior for educable mentally retarded (EMR) and slow learner (SL). This study also considered the relationship between IQ and adaptive behavior.

A sample of 57 mixed SES educable mentally retarded and slow learner students attending Greeley, Colorado public schools was selected for the study. All participants in the study consisted of students who were previously referred because of learning and/or behavioral problems in a regular classroom situation. The EMR students were previously classified on the basis of Colorado state criteria which includes an individual measure of intelligence and a measure of adaptive behavior. Colorado criteria states that an IQ score should be 1.75 standard deviations from the mean (below 74 on the WISC-R). The SL group was classified on the basis of IQ scores only.[2] The EMR group ranged in IQ from 55-74 and was placed in an EMR self-contained special education program. The SL group was composed of students whose IQ ranged from 75-85 and were not receiving services through special

education. Mean WISC-R full scale and Stanford-Binet IQ scores were as follows: EMR (WISC-R) = 66.48 (SD = 4.93); EMR (Stanford-Binet) = 68.46 (SD = 4.74); SL (WISC-R) = 81.11 (SD = 3.96); no SL students had Stanford-Binet scores. The 57 EMR and SL students ranged from six to ten years of age. Mean age scores were as follows: EMR = 108 months (SD = 15.65); SL = 113 months (SD = 16.0).

The ABS-SE and the ABIC were completed by both the teacher and the parent. Special education teachers rated the EMR students while regular education teachers rated the SL students. The third-party assessment technique was used with the parents on the ABS-SE and the ABIC. The classroom teachers completed the ABS-SE and the ABIC utilizing a first-party assessment technique where only the one person completes the scale. A third instrument, the CABS, was administered directly to the child.

Table 1 presents the raw score means and standard deviations of the various instruments based on respondents and groups. A 2 X 2 (Group x Respondent) ANOVA

Insert Table 1 about here

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was computed to determine whether there was a significant difference between how the groups (EMR, SL) and/or respondents (parents, teachers) reported information on the ABIC. Results indicated that main effects for groups were found on all subtests: Family, F (1,55) = 11.18, $p < .002$, Community, F (1,55) = 13.68, $p < .001$, Peer Relations, F (1,55) = 19.97, $p < .001$, Non-Academic School Roles, F (1,55) = 14.66, $p < .001$, Earner/Consumer, F (1,55) = 13.26, $p < .001$, Self Maintenance, F (1,55) = 6.11, $p < .01$, and for the Total Score, F (1,55) = 12.86, $p < .001$. Scores were consistently higher for the SL group than for the EMR group. In addition main effects were also found between respondents for Community, F (1,55) = 3.90, $p < .05$, Earner/Consumer, F (1,55) = 7.25, $p < .01$, and Self Maintenance subtests, F (1,55) = 5.76, $p < .01$. On these three subtests parents reported higher

scores than teachers suggesting that parents rate their children as having better adaptive behavior skills in these areas.

A 2 X 2 (Group x Respondent) ANOVA was also completed on the data obtained from the ABS-SE. Results indicated that main effects for groups were found only on the Community Self-Sufficiency subtest, F (1,55) = 3.97, $p < .05$, and the Comparison Score, F (1,55) = 7.16, $p < .01$. Students in the SL group again scored higher than the EMR students. Significant main effects were similarly recorded for respondents on the Community Self-Sufficiency subtest, F (1,55) = 67.77, $p < .001$, and the Comparison Score, F (1,55) = 28.41, $p < .001$. In both cases parents reported higher scores than teachers indicating that they tend to rate their children higher in adaptive behavior skills. In addition interaction effects were found on the Personal Self-Sufficiency, F (1,55) = 4.27, $p < .05$, and Personal/Social Responsibility subtests, F (1,55) = 4.49, $p < .05$, indicating that teachers' ratings of SL students were lower than their rating of EMR students.

Finally, T-test comparisons were conducted on the CABS to determine group differences. Results indicated that students in the SL group scored significantly higher on all subtests: Language Development, t (1,55) = 3.00, $p < .01$, Independent Functioning, t (1,55) = 2.71, $p < .01$, Family Role Performance, t (1,55) = 3.14, $p < .01$, Economic-Vocational Activity, t (1,55) = 3.98, $p < .01$, Socialization, t (1,55) = 3.41, $p < .01$, and on the Total Score, t (1,55) = 3.63, $p < .01$.

Multiple correlation matrices were established by comparing Pearson correlation coefficients for the various scores for each respondent on the different instruments.[3] Results were analyzed by comparing "similar" subtests and total scores from the three instruments. For example, the subtests of Self-Maintenance on the ABIC and Independent Functioning on the CABS were compared to the

Personal Self-Sufficiency factor on the ABS-SE in order to consider self help skills. Total score comparisons were utilized to determine the concurrent validity of the ABIC and CABS when compared to the ABS-SE. Results of the correlational analyses for "similar" subtests among the various instruments indicated little consistent agreement between the various comparisons. While a significant correlation may have been found between two of the subtests on different instruments for one group or respondent, significant correlations were not always found for different groups or respondents on the same two subtests.

Using total score comparisons, it was determined that the concurrent validity of the ABIC when compared to the ABS-SE appears to be low. The highest correlation was .41 ($p < .05$) when teachers of EMR students responded on both the ABS-SE and the ABIC. The concurrent validity of the CABS when compared to the ABS-SE is fairly good (moderate). When teachers and parents of EMR students responded the correlations were .56 and .46, respectively. Both are significant at the .01 level. When parents of SL students responded, the correlation was .61 ($p < .01$). Comparisons between total scores and IQ also indicate inconsistent findings as see in Table 2.

Insert Table 2 about here

In summary, results of this study indicate that SL students score higher in adaptive behavior skills than EMR students on all three measures examined. Also, parents, as opposed to teachers, rated the student as having better adaptive behavior skills. The inconsistent findings on "similar" subtest areas are seen as supporting Adams' (1973) and Baumeister and Muma's (1975) premise that no single instrument can accurately define such a concept. It appears that several instruments are labeled as "adaptive behavior" scales but each tends to define the concept in a different manner. A continued need to include a measure of

adaptive behavior along with an intellectual assessment in the evaluation of students being considered for possible placement in special education programs is justified considering the inconsistent findings when IQ and adaptive behavior scores are compared.

Differences between the various instruments may be the result of categorical differences as noted by Bailey and Harbin (1980). They classified the ABS-PSV (now the ABS-SE) as a psychosocial measure while the ABIC was classified as a social systems measure of adaptive behavior. Perhaps these categories are more distinct than initially realized and there is a need to decide, prior to administration, just what type information is desired.

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Table 1

Raw Score Means and Standard Deviations of the ABIC, ABS-SE and CABS by Respondents and Groups

ABIC

	F		C		P		S		EC		SM		T	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Teachers-EMR	51.53	14.54	27.39	9.38	42.33	11.37	29.83	10.05	18.89	7.58	57.97	13.89	37.97	10.72
Parents-EMR	55.86	11.44	32.50	9.23	43.03	8.36	31.97	8.35	22.25	7.63	63.89	9.97	41.50	8.65
Teachers-SL	64.33	16.17	39.29	11.31	51.95	8.57	39.10	11.58	26.95	8.69	67.76	13.53	48.10	11.26
Parents-SL	66.05	15.59	39.52	13.41	52.86	9.69	41.67	12.33	28.57	8.30	69.14	12.24	49.43	11.29

ABS-SE

	PSS		CSS		PSR		SA		PA		Comp.	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Teachers-EMR	51.97	4.43	61.67	13.02	69.53	10.85	26.06	26.43	2.78	2.73	192.06	11.69
Parents-EMR	53.33	2.38	75.28	13.31	72.50	6.89	27.07	23.48	2.22	3.34	204.22	11.30
Teachers-SL	49.90	6.72	68.67	13.06	67.24	10.69	18.05	20.31	1.67	3.14	200.81	9.96
Parents-SL	53.38	5.85	80.76	10.78	76.24	6.04	18.81	14.29	1.05	2.22	208.52	11.21

CABS

	LS		IF		FRP		EVA		S		T	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Child-EMR	31.86	6.54	27.61	6.93	30.22	5.58	24.69	5.75	30.86	6.31	145.17	28.10
Child-SL	36.67	4.30	32.38	5.31	34.43	3.26	30.62	4.75	35.95	3.36	170.05	18.10

Table 2

Product Moment Correlations Between Instruments and IQ Scores

ABIC - Teachers

	F		C		P		S		EC		SM		T	
	EMR	SL	EMR	SL	EMR	SL	EMR	SL	EMR	SL	EMR	SL	EMR	SL
V	-.01	.33	.30	.56**	.03	.12	.01	.27	-.01	.35	-.05	.46*	.06	.40
P	.12	.12	.18	.04	.31	.08	.12	.04	.14	-.01	.29	-.01	.20	.05
FS	.09	.44*	.38*	.60**	.30	.19	.11	.30	.10	.37	.20	.47*	.21	.45*
S-B	.42**		.20		.19		.05		.14		.27		.23	

ABIC - Parents

	F		C		P		S		EC		SM		T	
	EMR	SL	EMR	SL	EMR	SL	EMR	SL	EMR	SL	EMR	SL	EMR	SL
V	-.14	.57**	.08	.59**	.07	.33	.02	.39	.00	.37	-.16	.38	.01	.51*
P	.34*	.08	-.02	.12	.33*	.13	.14	.26	.18	.22	.61**	-.01	.23	.15
FS	.14	.66**	.00	.70**	.31	.42	.11	.59**	.12	.57**	.37*	.41	.17	.64**
S-B	-.27		-.35		-.43**		-.37*		-.25		-.41*		-.38*	

ABS-SE - Teachers

	PSS		CSS		PSR		SA		PA		Comp.	
	EMR	SL	EMR	SL	EMR	SL	EMR	SL	EMR	SL	EMR	SL
V	-.17	.04	.11	.14	-.12	.13	-.09	-.27	.09	-.31	.10	.08
P	.37*	-.41	.30	-.28	.30	-.30	-.02	-.09	.31	.08	.05	-.30
FS	.21	-.25	.33*	-.06	.20	.37	-.05	-.30	.35*	-.20	.08	-.16
S-B	-.19		.52**		.08		.03		-.10		.61**	

ABS-SE - Parents

	PSS		CSS		PSR		SA		PA		Comp.	
	EMR	SL	EMR	SL	EMR	SL	EMR	SL	EMR	SL	EMR	SL
V	-.15	.06	-.27	.56**	-.27	.07	.12	-.12	.06	.08	-.08	.38
P	.35*	.00	.47**	-.33	.38*	-.15	.21	-.01	.13	-.14	.19	-.12
FS	.19	.05	.17	.33	.15	-.03	.30	-.12	.16	-.05	.10	.31
S-B	-.16		-.01		.48**		.34*		.13		-.22	

CABS - Child

	LD		IF		PRP		EVA		S		T	
	EMR	SL	EMR	SL	EMR	SL	EMR	SL	EMR	SL	EMR	SL
V	-.03	-.06	.04	.04	-.02	.18	.02	.21	-.10	.05	-.01	.05
P	.21	.03	.26	-.02	-.08	.09	.43**	.21	.28	-.03	.26	.01
FS	.16	-.02	.26	.05	-.07	.30	.42**	.42	.17	.03	.21	.08
S-B	.59**		.46**		.48**		.16		.82**		.59**	

* $p < .05$
** $p < .01$